AMENDMENTS TO THE ABSTRACT

Please amend the abstract as follows.

A computer system reconfigurable cache memory-includes a cache programmable memory-unit, [[;]] a functional unit in communication with the cache programmable-memory unit, and a reconfiguration module. The functional unit executes applications using the cache programmable-memory-unit. The reconfiguration module is for determining an optimal configuration of cache memory for a particular application and programming the cache programmable-memory-unit to the optimal configuration. A method of reconfiguring cache memory includes determining an optimal configuration of cache memory for a particular application executed by a functional unit using a cache programmable-memory-unit and programming the cache programmable-memory-unit to the optimal configuration.